






Key People/Scientists	
	<p>Spencer Silver (1941-2019) American chemist who specialised in adhesives. He invented the sticky glue on post-it-notes.</p>
	<p>Ruth Benerito (1916-2013) American chemist and inventor, who invented wrinkle free cotton.</p>
	<p>Jaime Garcia (1987-) American scientist who invented a new plastic which is entirely recyclable</p>
	<p>Sir Humphry Davy (1778-1829) A British chemist and inventor. Discovered how to separate gases.</p>

Key Questions	
What is the difference between melting and dissolving?	Melting involves only one substance while dissolving involves at least two substances. Melting takes place at a fixed temperature, but not dissolving.
What is a vacuum?	A space with no particles - not a solid, liquid nor gas.
Is sand a liquid?	Despite taking the shape of a container, sand is actually a solid because it is made up of individual tiny solids.
Is plasticine a liquid?	A solid can change its shape if a force acts on it. Plasticine changes its shape when it is moulded (a force acted on it) so it's therefore a solid.

Misconceptions/Key Facts
<p>Misconception: Confusion about hardness and strength.</p> <p>Fact: In science, hardness refers to the ability of a material to withstand scratching and strength refers to the ability of a material to support a heavy load without breaking or tearing.</p>

Diagrams/Visual Aids	
<p>Filtration</p> 	<p>Magnetisation</p> 
<p>Evaporation</p> 	

Key Vocabulary	
conductor	A material or device that conducts or transmits heat or electricity.
dissolve	When a solid comes incorporated or part of a liquid.
evaporating	The process of using heat to turn liquid into gas.
filtration	One process of separating small particles from a liquid.
insulator	A material that does not readily allow the passage of heat or electricity.
irreversible change	When the properties of a material change and can never be changed back such as burning, cooking or rusting.
reversible change	When the properties of a material change and can be changed back such as dissolving, evaporation and melting.
separate	To unjoin a solution, to regain the original matter. eg sieving, evaporation and filtration.
solubility	The ability to be dissolved, especially in water.
solution	A liquid which has a solid dissolved in it